

THE *Fats and Oils* SITUATION

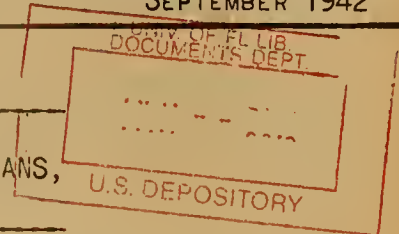
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

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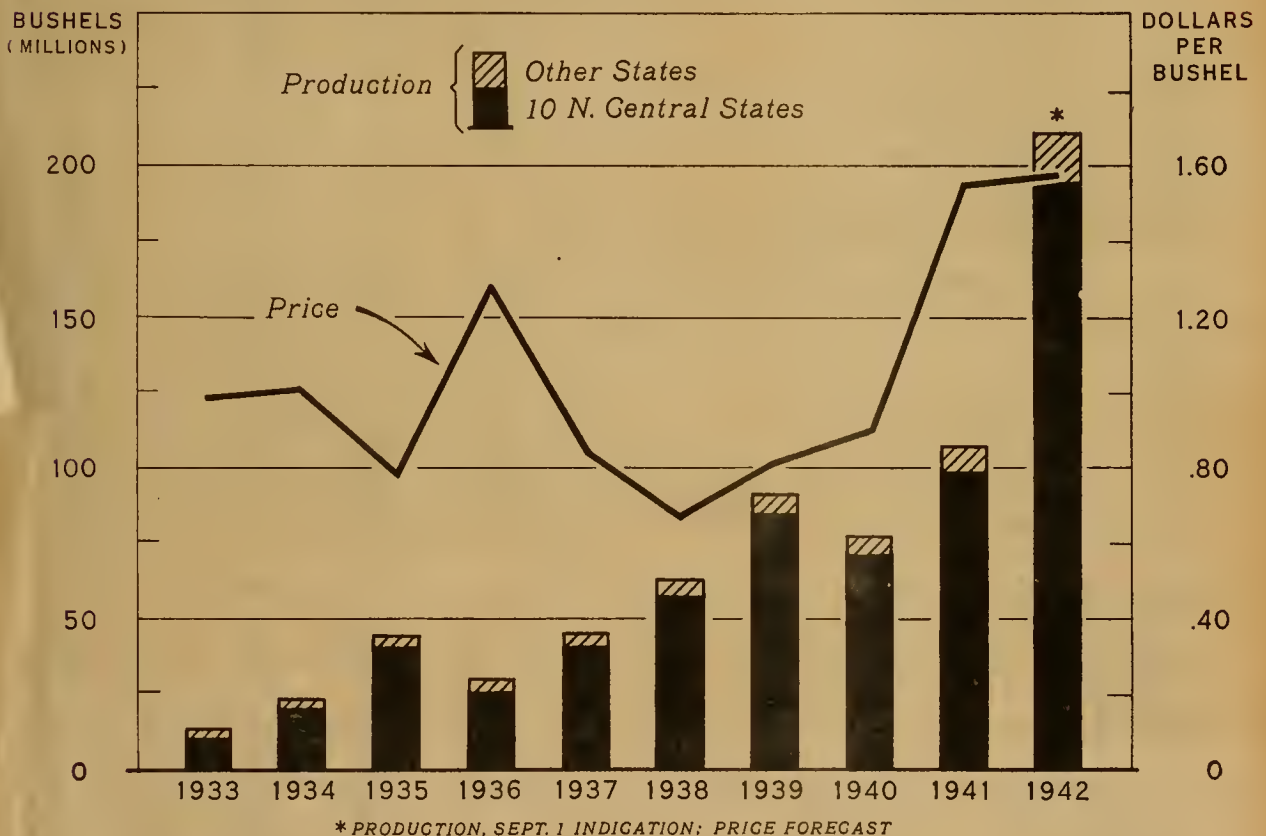
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PRODUCTION AND PRICES OF SOYBEANS,
1933-42.



SOYBEANS HARVESTED FOR BEANS: PRODUCTION AND AVERAGE PRICE RECEIVED BY FARMERS, UNITED STATES, 1933-42



U. S. DEPARTMENT OF AGRICULTURE

NEG. 42581

BUREAU OF AGRICULTURAL ECONOMICS

EXPECTED PRODUCTION OF SOYBEANS FOR BEANS IS INDICATED TO BE 98 PERCENT GREATER IN 1942 THAN IN 1941. WITH MINIMUM PRICES OF \$1.40 TO \$1.60 PER BUSHEL GUARANTEED BY THE GOVERNMENT, DEPENDING ON TYPE AND OIL CONTENT, THE AVERAGE PRICE RECEIVED BY FARMERS PROBABLY WILL BE AT LEAST AS HIGH FOR THE 1942 CROP AS FOR THE 1941 CROP. THE DEVELOPMENT OF SOYBEANS AS A COMMERCIAL OIL CROP HAS OCCURRED MOSTLY SINCE 1933, MAINLY IN THE CORN BELT.

Table 1.- Wholesale price per pound of fats and oils at specified markets, and index numbers of prices, August 1940 and 1941, June-August 1942

Item	1940		1941		1942	
	Cents		Cents		June	July
Butter, 92-score, Chicago	27.0		35.0		36.2	37.6
Butter, 92-score, New York	27.6		35.5		36.8	38.2
Oleomargarine, dom. veg., Chicago	14.8		16.5		19.0	19.0
Compounds (animal and veg. cooking fats), Chicago	9.0		15.1		17.0	17.0
Lard, loose, Chicago	4.6		9.8		11.8	11.9
Lard, prime steam, tierces, Chicago	7.9		10.1		12.6	12.8
Lard, refined, cartons, Chicago	6.1		11.1		14.5	14.5
Oleo oil, extra, tierces, Chicago	7.0		10.3		13.0	13.0
Oleostearine, bbl., N.Y.	5.2		9.8		10.5	10.5
Tallow, edible, Chicago	2.8		8.3		---	9.9
Corn oil, crude, tanks, f.o.b. mills	5.3		11.8		12.7	12.8
Corn oil, refined, bbl., N.Y.	7.9		14.8		15.0	15.5
Cottonseed oil, crude, tanks, f.o.b. S. E. mills	4.8		10.9		12.8	12.8
Cottonseed oil, p.s.y., tank cars, N.Y.	5.6		11.9		13.8	14.0
Peanut oil, crude, tanks, f.o.b. mills	5.3		11.2		15.0	12.9
Peanut oil, dom. refined, bbl., N.Y.	6.7		15.0		17.0	17.0
Soybean oil, crude, tank cars, midwestern mills	4.2		9.5		11.6	11.4
Soybean oil, dom., crude, drums, N.Y.	5.8		11.8		13.0	13.0
Soybean oil, refined, drums, N.Y.	6.9		12.3		14.2	14.2
Babassu oil, tanks, f.o.b. mills, Pacific Coast	---		9.2		---	---
Coconut oil, Manila, crude, tanks, f.o.b. Pacific Coast 1/	5.3		9.3		10.5	10.8
Coconut oil, Manila, crude, bulk, c.i.f. N.Y. 1/	5.8	2/	10.4		---	11.4
Coconut oil, Manila, refined, edible, tank cars, f.o.b. N.Y. 1/	---		---		---	12.0
Olive oil, edible, drums, N.Y.	31.6		73.6		66.3	60.4
Olive oil, inedible, drums, N.Y.	20.0		52.3		56.7	55.5
Olive-oil foots, prime, drums, N.Y.	8.7		17.0		19.5	19.4
Palm oil, Niger, crude, drums, N.Y. 1/	6.8		10.8		12.0	12.1
Rape oil, refined, denatured, drums, N.Y.	15.0		15.6		15.5	15.8
Rape oil, blown, drums, N.Y.	17.5		17.5		18.2	18.2
Sunflower oil, tank cars, f.o.b. N.Y.	---		---		---	14.3
Teaseed oil, crude, drums, N.Y.	12.5		24.0		---	30.0
Tallow, No. 1, inedible, Chicago	3.2		7.7		---	8.4
Grease, A White, Chicago	3.2		7.8		9.6	9.0
Menhaden oil, crude, tanks, f.o.b. Baltimore	4.7		7.4		8.9	8.9
Sardine oil, crude, tanks, Pacific Coast	4.9		7.7		8.9	8.9
Whale oil, refined, bleached winter, drums, N.Y.	9.5		10.5		11.1	11.1
Linseed oil, raw, tank cars, Minneapolis	7.9		10.2		12.8	12.6
Linseed oil, raw, drums, carlots, N.Y.	8.8		11.3		14.0	13.8
Perilla oil, crude, drums, N.Y.	17.7		21.4		24.6	24.5
Oilteica oil, drums, N.Y.	18.0		21.2		25.2	25.1
Tung oil, drums, N.Y.	25.8		34.0		40.2	39.6
Castor oil, No. 3, bbl., N.Y.	11.2		11.5		13.8	13.8
Castor oil, No. 1, tanks, N.Y.	10.9		11.0		13.0	13.0
Castor oil, dehydrated, drums, carlots, N.Y.	14.0		16.0		18.6	18.6
Cod-liver oil, med. U.S.P. bbl., N.Y.	29.3		36.7		36.4	36.4
Cod oil, Newfoundland, drums, N.Y.	---		10.5		12.0	12.0
INDEX NUMBERS (1924-29 = 100)						
Eight domestic fats and oils (1910-14 = 100)	77		117		130	133
Eight domestic fats and oils	55		83		92	94
All fats and oils (27 items)	60		91		100	101
Grouped by origin:						
Animal fats	56		80		87	89
Marine animal oils	87		114		127	127
Vegetable oils, domestic	58		110		128	129
Vegetable oils, foreign	85		141		156	148
Grouped by use:						
Butter	62		80		83	86
Butter, seasonally adjusted	64		82		90	92
Lard	38		77		96	97
Other food fats	61		125		138	136
All food fats	58		87		94	96
Soap fats	54		108		128	120
Drying oils	87		113		138	136
Miscellaneous oils	92		102		116	115
All industrial fats and oils	69		110		131	126

Prices compiled from Oil, Paint and Drug Reporter, The National Provisioner, The Journal of Commerce (New York), and reports of the Agricultural Marketing Administration and Bureau of Labor Statistics. Prices quoted include excise taxes and duties where applicable. Index numbers for earlier years beginning 1910 are given in Technical Bulletin No. 737 (1940) and The Fats and Oils Situation beginning December 1940.

1/ Three-cent processing tax added to price as originally quoted. 2/ Tanks, N.Y. 3/ Quoted in drums.

THE FATS AND OILS SITUATION

Summary

Prospects for the cottonseed, soybean, peanut, and flaxseed crops improved further during August. If September 1 indications are borne out, the potential output of oil from the 1942 harvest of these crops would be about 4,400 million pounds, compared with about 2,600 million pounds from the 1941 harvest. But with a production of soybeans in the North Central States greatly in excess of the annual crushing capacity of mills in the region, actual production of oil from the 4 crops during the crop year 1942-43 may not exceed 4 billion pounds.

On this basis, production of fats and oils from domestic materials in the 1942-43 crop year probably will total close to 12 billion pounds, over 2 billion more than in 1941-42. This increase would be about sufficient to offset increases in lend-lease exports and decreases in imports.

Prices of most fats and oils were little changed in August, although butter prices averaged 9 percent higher than in July. This rise was more than twice the normal seasonal advance and apparently resulted largely from increasing consumer purchasing power.

The Commodity Credit Corporation recently announced a series of contracts to be entered into with crushers and refiners as part of an overall program to facilitate production of vegetable oils from the large 1942 oilseed crops, to support prices to farmers, and to preserve price ceilings. The program establishes minimum prices to farmers for oilseeds and minimum prices to crushers for meal and crude oil. The minimum prices for crude oil are the same as the maximum prices set by the Office of Price Administration. To permit workable margins for manufacturers under ceiling prices on vegetable oil

products, the program also provides for resale of crude soybean, peanut, and cottonseed oil by Commodity Credit Corporation to refiners and other processors at 1/2 cent per pound under ceiling levels.

-- September 21, 1942

REVIEW OF RECENT DEVELOPMENTS

BACKGROUND.— Prices of fats and oils, which were unusually low in 1939 and 1940, advanced sharply in the first half of 1941, reflecting a tight shipping situation for imported materials, marked improvement in domestic demand, and Government purchases of lard for export. In the first quarter of 1942 further advances were made, notably by lard and linseed oil. Maximum wholesale prices for fats and oils, except butter, were first established on December 13, 1941, with subsequent revisions. Effective May 18, 1942, ceilings were established on retail prices of fats and oils, except butter and linseed oil, at highest prices charged during March 1942.

Butter Prices Advance;

Flaxseed Prices Decline

Reflecting a major advance in butter prices, the index of wholesale prices of 27 leading fats and oils rose in August to the highest level since February 1929. At 105 percent of the 1924-29 average, the index was 4 points higher than a month earlier and 14 points higher than a year earlier. At Chicago 92-score butter advanced from 39.5 cents per pound August 1 to 41.5 cents on August 31 and averaged 40.9 cents for the month, 9 percent higher than in July. As the normal seasonal increase from July to August is only a little over 4 percent, a large part of the rise apparently was due to pressure of increasing spending power in the hands of consumers.

Soybean oil prices were slightly higher in August than a month earlier but prices of cottonseed oil declined with the beginning of the new crushing season. In late August and early September, crude cottonseed oil at Southeastern mills was quoted at 12.5 cents per pound, 0.25 cent under the ceiling level, while prime summer yellow oil, tank cars, New York, at around 13.7 cents per pound, was 0.6 cent under the ceiling level. The price of linseed oil declined sharply in the last week of August. Prices of other fats and oils were mostly unchanged, remaining at or near ceiling levels.

With the new crop of flaxseed beginning to move to market in volume after the middle of August, quotations for No. 1 flaxseed at Minneapolis reached a low point of \$2.28 per bushel, about 20 cents under quotations early in the month. However, flaxseed prices quickly recovered most of the lost ground upon conclusion of arrangements between Commodity Credit Corporation and flaxseed crushers for supporting prices of the seed at \$2.40, Minneapolis basis.

Prices of linseed meal at New York rose nearly \$2 per ton in August, becoming unusually high for recent years in relation to Minneapolis prices.

The price of 32-percent meal at New York, averaging \$35.60 for the month, was 85 cents per ton over the price of 34-percent meal in Minneapolis, compared with \$1.65 under in July and with \$5.40 under in August 1941. This change in the relationship of meal prices apparently results from the large supply of flaxseed and soybeans in prospect in the Midwest in conjunction with a smaller supply of imported flaxseed, upon which East Coast mills depend.

Price Ceilings on Vitamin A Oils Lowered

New maximum prices for vitamin A natural oils and concentrates, effective August 20, were established in Maximum Price Regulation No. 203 issued August 15 by the Office of Price Administration. The new ceilings, stated in dollars and cents, are substantially lower than the ceilings which were in effect under Revised Price Schedule 53. They are designed to be high enough, however, to permit 1941 average operating margins and prices for fish livers. An extraordinary increase occurred in the prices of vitamin A bearing oils during 1941.

Control Over Oilseeds and Oilseed Products Vested in Commodity Credit Corporation

Directive No. 7, issued August 15 by the War Production Board, delegates authority to Commodity Credit Corporation to direct the crushing of 1942-crop cottonseed, peanuts, soybeans, and flaxseed, and to control purchases, sales and storage of these oilseeds and their products. Commodity Credit Corporation is also authorized to allocate to itself all or any part of the production of the oilseeds or their products, for resale on such terms as it deems appropriate. Products are defined as oil, meal, and linters. The directive was effective September 1 with respect to cottonseed, peanuts, and flaxseed, and becomes effective October 1 with respect to soybeans. It continues in effect for 1 year unless sooner revoked by the Chairman of the War Production Board. Purpose of the action is to place in the hands of a single Government agency the powers necessary to deal with problems of pricing, transportation, storage, and crushing that are expected to arise in connection with the marketing and processing of the large 1942 crops of oilseeds.

Under authority of the directive, Commodity Credit Corporation is developing an overall program, chiefly through contracts with processors, with the primary purposes of (1) protecting prices to farmers and implementing the price supports announced by the Department of Agriculture last winter as an inducement to farmers to increase the production of oil crops to meet war-time needs, (2) preserving the ceiling prices of the Office of Price Administration on vegetable oil products as part of the Government effort to keep down the cost of living, and (3) facilitating the processing of the large 1942 oilseed crops and the marketing of their products. The program will also make oil meals and oil cake available to livestock producers and feeders at reasonable prices to induce increased production of meats, milk, and eggs, and to conserve supplies of corn and other feed grains.

Cottonseed Crushing Program Announced

Commodity Credit Corporation announced August 28 that it is prepared to offer contracts to cottonseed crushers under which it will agree to support

prices of cottonseed products and crushers in turn agree to purchase cottonseed at not less than specified prices. The minimum price to be paid by processors for cottonseed is \$49 per ton for basis grade seed at gins in Texas, Oklahoma, and New Mexico, and \$50 in all other States. Prices will include differentials for grade in areas where the official grading system is used. In other areas, to be designated by Commodity Credit Corporation, the price will be 102 percent of the basis grade price.

On the basis of these support prices, taking into consideration average quality premiums and discounts and average ginner's margin of not more than \$3 per ton, prices to growers are expected to average approximately \$47.50 per ton. Prices actually received by growers will, of course, vary from time to time and by areas according to the quality of seed being marketed, prices being paid by mills, and the ginner's margin. Weather during the harvest period will affect the quality of the seed; wet weather, for example, would tend to increase moisture content and decrease the value of the seed.

Commodity Credit Corporation will purchase linters not otherwise allocated by the War Production Board. The Corporation will also purchase at the Office of Price Administration ceiling prices all cottonseed oil manufactured from the 1942 crop that contracting processors are unable to sell at such prices after making every effort to do so. Oil purchased by the Corporation is to be stored by the processors without charge.

Under the terms of the contract being offered, the minimum trade price of bulk cottonseed cake will be \$31.50 per ton f.o.b. mill for cake with a protein content of 41 percent, September delivery, and will rise seasonally up to \$33 per ton for February to July delivery. Minimum prices for bagged meal and cake will average about \$3.50 per ton above the price for bulk cake. The seasonal rise in prices will make it profitable for purchasers to move the material promptly to farms or plants. Commodity Credit Corporation will purchase, at \$1.00 to \$1.50 under minimum trade prices, all cottonseed cake and meal offered by contracting mills, providing satisfactory arrangements have been made for storage.

Flaxseed Crushers Eligible
for Loans on Linseed Oil

Commodity Credit Corporation also announced August 28 that contracts were being made with flaxseed crushers providing for non-recourse loans on linseed oil up to 40 percent of production from the 1942 crop of domestic flaxseed, conditioned on the payment of \$2.40 per bushel for No. 1 flaxseed, Minneapolis basis. Loans are being made at 12 cents per pound on pure raw linseed oil, usual good quality, stored in Zone 1 (Minneapolis, including Chicago); 12.2 cents in Zone 2 (Detroit, Cleveland, Buffalo); and 12.4 cents in Zone 3 (New England, including New York and New Jersey). The contract provides also that linseed meal shall not be sold at less than \$30 bulk, f.o.b. plant basis. It was announced that the movement of flaxseed to East Coast Mills for crushing will be handled by supplementary agreement.

Alternative Contracts Offered
Soybean Crushers

Provisions of contracts being offered processors of 1942 crop soybeans were announced September 10. The contracts specify minimum prices to be paid farmers or elevators for soybeans and minimum prices at which oil and meal are to be sold. In the case of plants which cannot operate without loss, under ceiling prices for oil and minimum prices for meal, Commodity Credit Corporation agrees to buy from the processor all soybeans except those to be used for the manufacture of products other than crude soybean oil and meal. These beans will be resold to the processor at "net processor value" based upon average yield of oil from beans grown in the area where the plant is located and on the average product value, based on the support prices to the processor for crude oil and meal, with the deduction of a stipulated margin of from 22 cents to 29 cents per bushel depending upon size and type of plant.

In either case the processor agrees to buy soybeans of U. S. Grade No. 4 or better either directly from producers at not less than support prices, minus applicable discounts, or from country elevators on the same basis, plus elevator handling charges of not less than 3-1/2 cents per bushel. The support prices at producers' normal delivery points range from \$1.60 per bushel for green and yellow varieties to \$1.40 per bushel for brown and black varieties with low oil content. Specified discounts are to be applied to soybeans grading lower than U. S. Grade No. 2.

Ten producing areas are set up in the contracts to avoid unnecessary use of transportation facilities. Each processor, unless otherwise authorized by Commodity Credit Corporation, will confine his purchases of soybeans to the area in which his plant is located.

Sellers' prices for crude oil are at ceiling levels as follows:

- At Midwestern and Southern Mills - 11-3/4 cents per lb.
f.o.b. plant
- At plants in Michigan, Ohio, Virginia, North Carolina,
and north and east thereof - - - - 11-7/8 cents per
lb. f.o.b. plant
- At plants in California, Oregon, and Washington - - - -
12-1/2 cents per lb. f.o.b. plant

If the processor cannot sell the oil to the trade at ceiling prices, Commodity Credit will buy it at 1/8 of a cent per pound below the ceiling level.

The minimum selling price for soybean meal is \$30 per ton bulk, mills, plus an increase of 25 cents per ton on the first day of each month from November 1942 to June 1943. Price differentials apply on meal delivered in carload and less than carload lots, as well as on bagged meal and pellets. Commodity Credit Corporation also agrees to buy meal from crushers at \$1.50 per ton less than the basic price of bulk meal, plus \$3 for bagging, plus freight.

Peanut Crushers Offered Contracts

Terms of a Commodity Credit Corporation contract being offered to peanut oil mills were announced September 11. The contract specifies certain minimum prices for peanut oil, meal and cake. Peanuts will be sold to crushers by designated cooperative producers associations (see peanut marketing program below).

The basic selling prices for crude peanut oil (basis 5 percent refining loss,) f.o.b. mill, are at ceiling levels as follows: Mississippi Valley and Southeastern mills, 13 cents per pound; Texas and Oklahoma, 12-7/8 cents per pound. Usual or normal location differentials apply within these areas; prices in other areas are based on these prices with usual or normal location differentials. The crusher is expected to make every effort to sell peanut oil through usual trade channels but if he cannot sell the oil, Commodity Credit Corporation offers to buy it at the stipulated basic prices.

Minimum trade prices are established for the various types and grades of peanut cake and meal. The minimum for prime quality meal, 45-47 percent protein, bulk, f.o.b. mill, is set at \$31.50 per ton for September delivery, rising 30 cents each month to \$33.00 for February-July delivery. Minimum prices for sacked meal are \$3.00 per ton higher than the corresponding minimum bulk prices. The crusher is expected to make every effort to sell peanut cake and meal, but if he cannot do so at minimum support prices, Commodity Credit Corporation will purchase cake at \$1.50 per ton under the applicable minimum trade price, and meal, regardless of protein content, at \$1.50 per ton less than the minimum trade price for meal of 45-57 percent protein content.

Refiners to Get Crude Oil
1/2 Cent Under Ceilings

On September 8, the Department of Agriculture announced terms of a contract being offered to refiners of cottonseed, peanut, and soybean oils by Commodity Credit Corporation. Under this contract, refiners will purchase crude oil at Office of Price Administration ceiling prices from crushers who are participating in the over-all program to facilitate processing of this year's record oil crops. Refiners will then sell the oil to the Corporation at the same prices they paid for it and buy it back at a reduction of 1/2 cent a pound.

The contract provides for the optional purchase of refined oil by Commodity Credit Corporation at the basic crude price plus specified refining costs, freight, and loading.

Loan and Purchase Values Increased For
New-Crop Soybeans Held Until Next Spring

Measures to support prices to farmers for 1942-crop soybeans as originally announced last February included an offer to pay \$1.60 per bushel for high oil-content green or yellow beans delivered at country points, and an offer to lend \$1.65 per bushel on high oil-content green and yellow beans stored in approved warehouses and delivered at country points on or after June 30. Recently the loan offer has been increased to \$1.67 per bushel for delivery on or after June 30, and the purchase price has been amended to increase one cent on the first of each month from January to June. The same discounts for beans of lower oil-content or grade will be made as in the original plan.

Purpose of the new plan is to encourage farmers to hold beans in storage for a longer than usual period. More soybeans will be produced in the North Central States in 1942 than can be crushed in a year's operations by mills in

the region, so that part of the crop will have to be moved to other areas. It would be desirable to defer this movement until after the seasonal peak load carried by the railroads in the fall and winter.

1942 Peanut Marketing Program Announced

Details of a program to encourage disposition of farmers' stock peanuts for crushing for oil to meet wartime needs were announced August 25 by the Department of Agriculture. Similar to previous peanut marketing programs, it will be conducted by the Agricultural Marketing Administration and provides for the disposition of both "quota" and "excess" peanuts through designated producer agencies.

Under the program, "Quota" peanuts are those marketed within farm marketing quotas; and "excess" peanuts are those marketed in excess of farm marketing quotas. Cooperative producer associations will be designated by the Secretary of Agriculture to buy quota or excess peanuts and sell them either for crushing for oil, for shelling, for seed, or to hold them in storage until demand is determined.

Quota peanuts will be bought by the designated agencies at prices which average about \$124.00 per ton and are about 85 percent of parity. For excess peanuts delivered to the designated agencies, producers will be paid the market value for crushing for oil on the date of delivery, less estimated handling costs, or the prices announced January 16 by the Secretary of Agriculture for 1942 crop oil peanuts (equivalent to \$82.00 per ton for United States No. 1 White Spanish Type, \$78.00 for United States No. 1 Runner Type, and \$70.00 for United States Class A Virginia Type) whichever is higher. Excess peanuts will not be subject to the penalties of three cents a pound provided by the amended Agricultural Adjustment Act of 1938 when the peanuts are delivered to or marketed through the designated agencies. The designated agencies may dispose of peanuts for crushing for oil at not less than approved prices; for cleaning and shelling at not less than the price for quota peanuts of like type and grade, plus the cost of handling, plus \$3.00 per ton; or for seed at prices not less than the purchase price, plus the cost of handling and costs incidental to their sale for seed. Any profits from the operation of the program will be applied first to the cost of operation, and second will be distributed to producers of excess peanuts on an equitable basis.

Peanuts bought by the designated agencies will be graded according to United States standards for farmers' stock peanuts, and for oil content, under supervision of the Agricultural Marketing Administration.

The 1942 acreage of peanuts to be picked and threshed is estimated by the Crop Reporting Board as of September 1, to be 4,173,000 acres yielding 2,930 million pounds. Of the acreage in the three major peanut-producing areas, 1,605,000 acres were allotted to producers for the production of quota peanuts, and it is estimated that 2,568,000 acres were planted in excess of acreage allotments. Total production of quota peanuts will probably be around 1,325 million pounds, leaving approximately 1,600 million pounds of excess peanuts. Not all excess peanuts will be crushed for oil, however, as some will be retained for seed and local uses.

Contractual Restrictions on Pilchard
Fishing Prohibited

With the opening of the pilchard (sardine) fishing season off the West Coast, the War Production Board issued Conservation Order M-206, effective September 1, prohibiting contracts or agreements that would directly or indirectly limit the catch of any fishing vessel or the frequency of its trips to the fishing grounds. Many vessels formerly used for fishing are now in the service of the armed forces and it is desirable that maximum use be made of the remaining craft. In 1941 production of pilchard oil amounted to about 136 million pounds, nearly 65 percent of total production of fish oils in the United States and Alaska. The largest use of fish oils is in the manufacture of paint and oilcloth, but important quantities are also used in the textile industry, in tanning leather, and in the preparation of cutting oils.

Government Purchases of Fats
and Oils Reduced in August

Purchases of lard and rendered pork fat by the Agricultural Marketing Administration amounted to about 35 million pounds in August compared with approximately 80 million pounds in July and an average of about 80 million pounds monthly since March. Purchases of salad oils, amounting to nearly 19 million pounds, were larger than in any previous month except June, and purchases of shortening, at 8 million pounds, were the largest that have been made. Margarine, edible tallow, oleo oil, and vitamin A oils were also bought during the month. Total purchases of fats and oils in August amounted to about 69 million pounds, 38 percent under the monthly average since March. Seasonally small hog marketings, accompanied by some stringency in the domestic lard supply situation, were mainly responsible for the reduced rate of lard purchases in August. A sharp increase in the purchase rate is expected later in the year, when 1942 spring pigs reach market in volume.

Crushing of Soybeans and Flaxseed
Continues at High Rate

Consumption of soybeans and flaxseed by mills in July, reported to have amounted to 6.6 and 4.0 million bushels, respectively, indicates that the high rate of crushing of these crops in recent months was well maintained. With stocks of soybeans in all positions estimated at 22.3 million bushels July 1, a continuation of the July rate of crushing through August and September would reduce old crop stocks to about 2.5 million bushels before the new season begins.

Stocks of Fats and Oils Near
Minimum Working Level

July 31 stocks of primary fats and oils were slightly smaller than a month earlier but were still close to 2 billion pounds. The comparable figure for July 31 a year ago is not known, but at 2 billion pounds stocks are believed to be about at a minimum working level in relation to the current high rate of production and disappearance. Cold-storage stocks of lard and rendered pork fat on August 31, totaling 83 million pounds, were about 205 million pounds smaller than a year earlier and were the second smallest for that date since 1916.

Crop Prospects Improved Further in August

Substantial increases in the prospective production of soybean and cottonseed and moderate increases in flaxseed and peanuts were indicated by the September 1 crop report. A potential production of 1560 million pounds of cottonseed oil, 1650 million pounds of soybean oil, 460 million pounds of peanut oil, and 750 million pounds of linseed oil from domestic seed is possible. Actual production of soybean oil during the 1942-43 crop year probably will be smaller than the indicated potential production because the annual capacity of crushing mills in the northern and eastern States falls short of the prospective production of beans in that area. Total production of cottonseed, soybean, peanut, and linseed oils in the crop year 1942-43 may be tentatively estimated at about 4 billion pounds.

SOYBEAN PRODUCTION AND PRICES, 1933-42Production and Prices of
Soybeans at High Level

Production of soybeans for beans in the United States increased from about 13 million bushels in 1933 to approximately 107 million in 1941, roughly an 8-fold increase in 8 years. Another large increase will occur in 1942. According to September 1 indications, production will reach 211 million bushels this year, an increase of 98 percent over 1941. This increase is partly a result of unusually favorable growing conditions and partly a response to the wartime need for domestic production of fats and oils and to Government guarantees made to farmers last winter that prices of 1942-crop soybeans would be supported at \$1.40 to \$1.60 per bushel. The price of \$1.60 will apply to most of the crop in the regular commercial producing areas.

Prices received by farmers for soybeans in the crop years 1934-40 fluctuated mostly within a range of 68 cents to \$1.01 per bushel. In the 1936 crop year, when demand for soybean meal was strong, the average price was \$1.28 per bushel. The average price for the 7-year period as a whole was 90 cents. In the 1941 crop year, the heavy demand for fats and oils of domestic origin coupled with a strong demand for high-protein feedstuffs, lifted the price paid to farmers for soybeans to \$1.55 per bushel, 72 percent above the 7-year average. Government support of prices for the 1942 crop probably will result in a season average price at least as high as the 1941 price.

Soybeans for Oil, Predominantly
a Corn Belt Crop

The four States of Ohio, Indiana, Illinois, and Iowa will account for about 164 million bushels of the prospective 198 million bushel increase in soybean production from 1933 to 1942. According to September 1 indications, these four States will produce about 173 million bushels this year, 82 percent of the total crop, compared with 88 percent in 1941. Production of soybeans for oil has been concentrated in the Corn Belt for many years; this area was predominant even before the expansion that began in 1934.

Yields of soybeans per acre are materially higher in the Corn Belt States than elsewhere. In Ohio, Indiana, Illinois, and Iowa yields increased

from an average of 13.1 bushels per acre in 1924-28 to 18.4 bushels per acre in 1934-38. In the 3 years 1939-41, the average yield was 19.6. (See table 2). Meanwhile yields in the South Atlantic States fluctuated around an average level of about 12 bushels per acre, and yields in the South Central States around a level of about 8.5 bushels per acre, with a sharp increase, however, in 1940 and 1941 in Louisiana, Mississippi, and Arkansas. Main reason for the increasingly high yields in the Corn Belt has been the development and widespread planting of high-yielding varieties. In other areas soybeans are grown chiefly as a hay crop; the beans are harvested mostly to provide seed for the next season's acreage of soybeans for hay.

Yellow and green beans are preferred for crushing because the black and brown varieties are considerably lower in oil content and also produce a dark-colored meal which is discriminated against by feeders. Yellow and green beans predominate in the Corn Belt but brown and black varieties are most common where soybeans are grown mainly for hay.

Reduction in Corn Acreage a Factor Affecting Increased Soybean Production

Agricultural adjustment and soil conservation programs from 1934 to 1941 encouraged reduction of corn acreage in commercial corn areas. In Ohio, Indiana, Illinois, and Iowa, a reduction of 4.5 million acres occurred from 1933 to 1941. In the same period the acreage of soybeans harvested for beans in these States increased by 4.2 million. Soybeans can be grown in place of corn in most Corn Belt areas with relatively little change in farm practices and in most instances without additional equipment. It appears likely, therefore, that an important factor in the increase in soybean acreage and production from 1933 to 1941 was the availability of acreage released from corn. Other factors encouraging increased soybean production have been the drought, insect, and disease resisting qualities of soybeans and the generally satisfactory experience of farmers with respect to yields. An additional factor in 1942 has been the unusually favorable condition of pastures and hay crops, which has enabled many farmers to forego cutting soybeans for hay, allowing them to mature for harvest as beans.

Prices to Farmers Kept Up by Increasing Demand

The demand for soybean products has increased rapidly in recent years as a result both of technological advances in processing and of growing familiarity of users with the products. The development of processes for removing the bitter flavor of soybean oil only recently made it possible to use large quantities of soybean oil in food products. Since 1934, about 70 percent of the factory consumption of soybean oil has been in the manufacture of food products compared with an average of about 20 percent in 1931-34. Livestock feeders have become more familiar with the merits of soybean meal and, considering relative supplies, they are willing to pay higher prices for it than formerly in relation to prices of other high-protein feeds. Soybean meal also finds an increasing use in industry, notably in the manufacture of vegetable glue, plastics, and soy flour. Soy flour formerly was used almost entirely in "health foods", but is now being used in bakery products sold to consumers generally.

Another rapid advance in recent years has been made in the use of the solvent process of extracting oil from the beans. This method obtains about 11 pounds of oil from a bushel of high quality soybeans, compared with a yield of about 9 pounds by the expeller process and 8 pounds by hydraulic presses. Up until the 1941-42 season the growing use of the solvent process tended to reduce the margin between prices of soybean products and prices of soybeans.

Demand for Soybean Products Now Unusually High

Demand for soybean products has been at a record level in the 1941-42 marketing year. Soybean oil has shared in the heavy demand for all fats and oils arising from the high level of consumer purchasing power, and the demand for high-protein feeds, including soybean meal, has also been unusually strong as a result of the high prices for livestock products and the large numbers of animals on farms. In 1942-43 these factors will be accentuated. Live-stock numbers will reach new record levels, consumer purchasing power will be higher than ever before, export demand for fats and oils under lend-lease will be strong, and imports of fats and oils will be much smaller than in any recent year.

Further Expansion in Soybean Production Difficult

A slight further increase in the acreage of soybeans harvested for beans without reducing acreage in feed crops appears to be possible in 1943 in the North Central States, and a moderate increase could be obtained in the South, particularly in Virginia, North Carolina, Kentucky, Tennessee, Arkansas, Louisiana, and Mississippi, mainly by a shift of acreage from soybeans for hay to soybeans for beans. Production would not increase in proportion to acreage because most of the increase would occur in the South, where yields are lower.

To expand acreage more than this would require a reduction in the acreage of corn and other feed crops, including hay and pasture, below the level necessary for maintaining needed production of meat, milk, and eggs. It is likely, therefore, that soybean production cannot be increased much further under conditions expected to exist in the next year or two.

A limiting factor in the further expansion in soybean output, at least for the immediate future, is the lack of adequate crushing facilities in the Northern States. An estimated 100 to 110 million bushels of soybeans probably can be processed in northern and eastern soybean and copra mills in the 1942-43 crop year. An additional 6 or 7 million bushels can be handled by West Coast copra mills. A large reservoir of mill capacity exists in the South, but the shipment of any considerable quantity of soybeans to southern cottonseed mills for crushing will involve a large expense, particularly since most of the meal and part of the oil produced will have to be shipped to other areas for consumption. In any event, cottonseed and peanuts are likely to be crushed in the South before soybeans. Next spring and summer there will be a large potential capacity for handling soybeans in the South, but it is not likely that all of the crop produced this year will be crushed. Carry-over on October 1, 1943 may total 40 to 60 million bushels.

Table 2.—Soybeans: Acreage harvested for beans, yield per harvested acre, and production, by regions, 1924-42

Region	Average			1939	1940	1941	1942
	1924-28	1929-33	1934-38				
	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	acres	acres	acres	acres	acres	acres	acres
Acreage harvested for beans							
Illinois, Indiana, Ohio and Iowa.	237	593	1,941	3,699	3,997	4,764	8,112
Total, 10 North Central States ^{2/}	302	712	2,055	3,914	4,286	5,231	---
Total, 3 North Atlantic States ^{3/}	---	---	5	23	34	34	---
Total, 7 South Atlantic States ^{4/}	131	158	186	259	277	299	---
Total, 8 South Central States ^{5/}	63	88	158	221	182	291	---
Total, United States	495	959	2,404	4,417	4,779	5,855	10,867
Yield per harvested acre							
	Bushels	Bushels	Bushels	Bushels	Bushels	Bushels	Bushels
Illinois, Indiana, Ohio and Iowa.	13.1	16.9	18.4	22.4	16.8	19.6	21.4
Total, 10 North Central States ^{2/}	12.1	15.5	17.8	21.9	16.7	19.0	---
Total, 3 North Atlantic States ^{3/}	---	---	15.8	15.3	14.4	14.6	---
Total, 7 South Atlantic States ^{4/}	13.0	11.2	12.4	12.3	12.3	10.5	---
Total, 8 South Central States ^{5/}	8.8	7.9	8.1	8.7	10.9	12.4	---
Total, United States	11.9	14.1	16.7	20.7	16.2	18.2	19.5
Production							
	Mil.bu.	Mil.bu.	Mil.bu.	Mil.bu.	Mil.bu.	Mil.bu.	Mil.bu.
Illinois, Indiana, Ohio and Iowa.	3.2	10.0	36.4	83.0	67.3	93.4	173.3
Total, 10 North Central States ^{2/}	3.7	11.1	37.4	85.8	71.5	99.5	---
Total, 3 North Atlantic States ^{3/}	---	---	.1	.4	.5	.5	---
Total, 7 South Atlantic States ^{4/}	1.7	1.8	2.3	3.2	3.4	3.1	---
Total, 8 South Central States ^{5/}	.5	.7	1.3	1.9	2.0	3.6	---
Total, United States	6.0	13.5	41.1	91.3	77.4	106.7	211.5

^{1/} September 1 indications.

^{2/} Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Nebraska and Kansas. Minnesota not reported before 1938; Nebraska not reported before 1940.

^{3/} New York, New Jersey, and Pennsylvania. New York and Pennsylvania not reported before 1934; New Jersey not reported before 1938.

^{4/} Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina and Georgia.

^{5/} Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma and Texas. Texas not reported before 1934.

Table 3.- Prices of specified oil-bearing materials, August 1940 and 1941, June-August 1942

Item	Unit	August		1942		
		1940	1941	June	July	Aug.
		Dol.	Dol.	Dol.	Dol.	Dol.
Castor beans, Brazilian, f.o.b.						
Brazilian ports	Long ton:	1/48.00	1/68.40	75.00	75.00	75.00
Cottonseed, U. S. farm price	Short ton:	21.16	36.94	43.87	43.20	44.04
Flaxseed, No. 1, Minneapolis	Bu.	1.50	1.89	2.54	2.46	2.40
Flaxseed, U. S. farm price	"	1.36	1.68	2.35	2.28	2.26
Peanuts (for nuts and oil), U. S.						
farm price	100 lb.	3.44	4.29	5.51	5.59	5.99
Soybeans, No. 2 Yellow, Chicago	Bu.	.81	1.57	1.72	1.74	1.71
Soybeans, U. S. farm price	"	.67	1.29	1.63	1.62	1.58

Compiled from Oil, Paint and Drug Reporter, Daily Trade Bulletin (Chicago)
Chicago Journal of Commerce, Daily Market Record (Minneapolis), and reports of
the Bureau of Agricultural Economics.

1/ C. and f., New York.

Table 4.- Price per ton of specified oilseed meals, August 1940 and 1941, June-August 1942

Item 1/	August		1942		
	1940	1941	June	July	Aug.
	Dol.	Dol.	Dol.	Dol.	Dol.
Copra meal, Los Angeles	19.25	37.50	49.60	49.50	50.10
Cottonseed meal, 41 percent protein, Memphis ..	27.10	34.45	34.30	35.40	35.20
Cottonseed meal, 41 percent protein, Chicago ..	33.40	40.25	40.55	41.30	41.10
Linseed meal, 34 percent protein, Minneapolis ..	24.40	33.50	35.20	35.40	34.75
Linseed meal, 32 percent protein, New York	26.25	28.10	31.70	33.75	35.60
Peanut meal, 45 percent protein, f.o.b.					
Southeastern mills	21.94	32.94	37.30	36.31	36.62
Soybean meal, 41 percent protein, Chicago	24.60	36.20	37.90	41.80	42.60

Compiled from records of the Agricultural Marketing Administration.

1/ Bagged, carlots.



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